## CLAIMS

1. A leg type mobile robot comprising: an body;

legs each connected to the body via a first joint; and foots each connected to an end part of the leg via a second joint, wherein the foot includes

at least one foot portion, which has a ground area to be grounded on a floor surface at the bottom thereof, and

a floor reaction force detector for detecting floor reaction force acting from a floor surface through the foot portion, and wherein

the center (Pc) of the second joint is offset against the position Pa in a plane view, the position Pa is the position where the distance to the remotest point of at least one ground area becomes minimum, and the center (Pb) of the floor reaction force detector is provided so that the center Pb is in the vicinity of the position Pa than the center Pc of the ankle joint in a plane view.

20

15

- 2. A leg type mobile robot according to claim 1, wherein the center (Pb) of the floor reaction force detector is offset to a rear direction with respect to the position (Pa).
- 25 3. A leg type mobile robot according to claim 2, wherein the center (Pb) of the floor reaction force detector is

positioned on a line segment connecting the position (Pa) and the center (Pc) of the second joint.

- 4. A leg type mobile robot according to claim 1, wherein
  the center (Pb) of the floor reaction force detector is
  offset to a rear direction in a center side of the leg type mobile
  robot with respect to the position (Pa).
- 5. A leg type mobile robot according to claim 4, wherein
  the center (Pb) of the floor reaction force detector is
  located on the perpendicular taken down from the center (Pc)
  of the second joint to the line segment extended from the
  position (Pa) to a rear direction.
- 15 6. A leg type mobile robot according to claim 4, wherein the center (Pb) of the floor reaction force detector is located on the perpendicular taken down from the center (Pc) of the second joint to the line segment extended from the position (Pa) to a center of the leg type mobile robot.

20

7. A leg type mobile robot according to claim 4, wherein the center (Pb) of the floor reaction force detector is positioned on a line segment connecting the position (Pa) and the center (Pc) of the second joint.

25